

## GLOSSARY

**1995 Base Case** A model simulation that provides and understanding of the how the 1995 water management system with 1995 land use and demands responds to historic (1965-1995) climatic conditions.

**1-in-10 Year Drought** A drought of such intensity, that it is expected to have a return frequency of once in 10 years. A drought in which below normal rainfall, which has a 90 percent probability of being exceeded over a twelve-month period. This means that there is only a ten percent chance that less than this amount of rain will fall in any given year.

**1-in-10 Year Level of Certainty** Probability that the needs for reasonable-beneficial uses of water will be fully met during a 1-in-10 year drought.

**Acre-Foot** The volume of water that would cover one acre to a depth of one foot; 43,560 cubic feet; 1,233.5 cubic meters; 325,872 gallons.

**Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS)** A simple water budget model for estimating irrigation demands that estimates demand based on basin specific data.

**Agricultural Self-Supplied Water Demand** The water used to irrigate crops, to water cattle, and for aquaculture (fish production), that is not supplied by a public water supply utility.

**Anoxic** Denotes the absence of oxygen

**Aquifer** A portion of a geologic formation or formations that yield water in sufficient quantities to be a supply source.

**Aquifer System** A heterogeneous body of intercalated permeable and less permeable material that acts as a water-yielding hydraulic unit of regional extent.

**Basin (Ground Water)** A hydrologic unit containing one large aquifer or several connecting and interconnecting aquifers.

**Basin (Surface Water)** A tract of land drained by a surface water body or its tributaries.

**Bathymetry** The measurement of water depth at various places in a body of water.

**Best Management Practices (BMPs)** Agricultural management activities designed to achieve an important goal, such as reducing farm runoff, or optimizing water use.

**Central and Southern Florida Project Comprehensive Review Study (Restudy)** A five-year study effort that looked at modifying the current C&SF Project to restore the

greater Everglades and South Florida ecosystem while providing for the other water related needs of the region. The study concluded with the Comprehensive Plan being presented to the Congress on July 1, 1999. The recommendations made within the Restudy, that is, structural and operational modifications to the C&SF Project, are being further refined and will be implemented in the Comprehensive Everglades Restoration Plan (CERP).

**Central and Southern Florida (C&SF) Project** A complete system of canals, storage areas, and water control structures spanning the area from Lake Okeechobee to both the east and west coasts, and from Orlando south to the Everglades. It was designed and constructed during the 1950s by the United States Army Corps of Engineers (USACE) to provide flood control and improve navigation and recreation.

**Class I through V Surface Water Quality Standards** As defined by Chapter 62-302.400 Florida Administrative Code, all surface waters in Florida have been classified according to designated use as follows:

- Class I Potable water supplies
- Class II Shellfish propagation or harvesting
- Class III Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife
- Class IV Agricultural water supplies
- Class V Navigation, utility, and industrial use

**Commercial and Industrial Self-Supplied Water Demand** Water used by commercial and industrial operations using over 0.1 million gallons per day.

**Comprehensive Everglades Restoration Plan (CERP)** The implementation of recommendations made within the Restudy, that is, structural and operational modifications to the C&SF Project are being further refined and will be implemented through this plan.

**Consumptive Use Permit** A permit issued by the SFWMD allowing utilities to withdraw ground water for consumptive use.

**Control Structure** A man-made structure designed to regulate the level/flow of water in a canal (e.g., weirs, dams).

**Epiphyton** Plants that derive their moisture and nutrients from the air and rain and usually grow on other plants

**District Water Management Plan** Regional water resource plan developed by the District under Chapter 373.036, F. S.

**Drawdown** The drawdown at a given point is the distance the water level is dropped.

**Estuary** A water passage where the ocean or sea meets a river.

**Eutrophication** The gradual increase in nutrients in a body of water. Natural eutrophication is a gradual process, but human activities may greatly accelerate the process.

**Evapotranspiration** Water losses from the surface of soils (evaporation) and plants (transpiration).

**Food Web** The totality of interacting food chains in an ecological community.

**Geographic Informations Systems (GIS) Mapping** The abstract representation of natural (or cultural) features of a landscape into a digital database, geographic information system.

**Governing Board** Governing Board of the South Florida Water Management District.

**Ground Water** Water beneath the surface of the ground, whether or not flowing through known and definite channels.

**Harm** *(Term will be defined during proposed rule development process)* An adverse impact to water resources or the environment that is generally temporary and short-lived, especially when the recovery from the adverse impact is possible within a period of time of several months to several years, or less. Harm is defined to occur to this estuary system when freshwater flows are less than the rate of evaporation for a period of two consecutive months during the dry season. Under these conditions, it is expected that most of the oligohaline zone will be lost or impacted.

**Hectare** A unit of measure in the metric system equal to 10,000 square meters (2.47 acres).

**Hypoxic** A deficiency of oxygen reaching the tissues of the body.

**Isohaline Zone** Transition between the saltier mesohaline and the fresher oligohaline habitats; in this document it has a salinity of 5 parts per thousand and defines the downstream extent of viable oligohaline habitat under low flow situations.

**Lagoon** A body of water separated from the ocean by barrier islands, with limited exchange with the ocean through inlets.

**Lake Okeechobee** This lake measures 730 square miles and is the second largest freshwater lake wholly within the United States.

**Marsh** A frequently or continually inundated wetland characterized by emergent herbaceous vegetation adapted to saturated soil conditions.

**Mesohaline** Term to characterize waters with salinity of 5 to 18 parts per thousand, due to ocean-derived salts.

**Minimum Flows and Levels (MFLs)** The point at which further withdrawals would cause significant harm to the water resources/ecology of the area.

**National Geodetic Vertical Datum (NGVD)** A nationally established references for elevation data.

**Natural Resources Conservation Service (NRCS)** An agency of the U.S. Department of Agriculture (USDA) that provides technical assistance for soil and water conservation, natural resource surveys, and community resource protection.

**Nekton** Macroscopic organisms swimming actively in water, such as fish (contrast to plankton).

**Phytoplankton** The floating, usually minute, plant life of a body of water.

**Oligohaline** Low salinity region of an estuary where fresh and saline waters meet; salinity range is typically 0.5 to 5.0 parts per thousand.

**Oligosaline** Term to characterize water with salinity of 0.5 to 5.0 parts per thousand, due to land-derived salts.

**Organics** Being composed of or containing matter of, plant and animal origin.

**Public Water Supply Demand** All potable water supplied by regional water treatment facilities with pumpage of 0.5 million gallons per day or more to all customers, not just residential.

**Reasonable-Beneficial Use** Use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest.

**RECOVER** A comprehensive monitoring and adaptive assessment program formed to perform the following for the Comprehensive Everglades Restoration Program: restoration, coordination, and verification.

**Recreational Self-Supplied Water Demand** The water used for landscape and golf course irrigation. The landscape subcategory includes water used for parks, cemeteries, and other irrigation applications greater than 0.1 million gallons per day. The golf course subcategory includes those operations not supplied by a public water supply or regional reuse facility.

**Regional Water Supply Plan** Detailed water supply plan developed by the District under Section 373.0361, Florida Statutes.

**Residential Self-Supplied Water Demand** The water used by households whose primary source of water is private wells and water treatment facilities with pumpages of less than 0.5 million gallons per day.

**Saltwater Water Intrusion** This occurs when more dense saline water moves laterally inland from the seacoast, or moves vertically upward, to replace fresher water in an aquifer.

**Serious Harm** *(Term will be defined during proposed rule development process)* An extremely adverse impact to water resources or the environment that is either permanent or very long-term in duration. Serious harm is generally considered to be more intense than significant harm.

**Significant Harm** *(Term will be defined during proposed rule development process)* An adverse impact to water resources or the environment, relating to an established minimum flow or level for a water body; generally temporary but not necessarily short-lived, especially when the period of recovery from the adverse impact exceeds several months to several years in duration; more intense than harm, but less intense than serious harm. St. Lucie Estuary significant harm occurs when freshwater flows to the estuary are less than the rate of evaporation for a period of two consecutive months during the dry season for two or more years in succession.

**Slough** A channel in which water moves sluggishly, or a place of deep muck, mud, or mire. Sloughs are wetland habitats that serve as channels for water draining off surrounding uplands and/or wetlands.

**Stage** The elevation of the surface of a surface water body.

**Standard Project Flood (SPF)** A mathematically derived set of hydrologic conditions for a region that defines the water levels that can be expected to occur in a basin during an extreme rainfall event, taking into account all pertinent conditions of location, meteorology, hydrology, and topography.

**Storm Water** Surface water resulting from rainfall that does not percolate into the ground or evaporate.

**Supply-Side Management** The conservation of water in Lake Okeechobee to ensure that water demands are met while reducing the risk of serious or significant harm to natural systems.

**Surface Water** Water that flows, falls, or collects above the surface of the earth.

**Surface Water Improvement and Management (SWIM) Plan** Plan prepared according to Chapter 373, F.S.

**Tidal Rivers** Water bodies that receive fresh water from areas other than runoff (from the upstream watershed), are flushed to some extent during a tidal cycle, and are subject to saltwater intrusion from downstream areas.

**Total Maximum Daily Load (TMDL)** The level of loading to a body of water that will protect uses and maintain compliance with water quality standards (defined in the Clean Water Act).

**Turbidity** The measure of suspended material in a liquid.

**Uplands** An area with a hydrologic regime that is not sufficiently wet to support vegetation typically adapted to life in saturated soil conditions; nonwetland.

**Vertical Migration** The vertical movement of oil, gas, contaminants, water, or other liquids through porous and permeable rock.

**Wastewater** The combination of liquid and waterborne discharges from residences, commercial buildings, industrial plants and institutions together with any ground water, surface runoff or leachate that may be present.

**Water Budget** An accounting of total water use or projected water use for a given location or activity.

**Water Conservation** Reducing the demand for water through activities that alter water use practices, e.g., improving efficiency in water use, reducing losses of water, and reducing waste of water.

**Water Conservation Areas (WCAs)** That part of the original Everglades ecosystem that is now diked and hydrologically controlled for flood control and water supply purposes. These are located in the western portions of Miami-Dade, Broward, and Palm Beach counties, and preserve a total of 1,337 square miles, or about 50 percent of the original Everglades.

**Watershed** The drainage area from which all surface water drains to a common receiving water body system.

**Water Shortage Declaration** Water shortage declarations can be made by the District's Governing Board pursuant to Rule 40E-21.231, Florida Administrative Code, which states "If ...there is a possibility that insufficient water will be available within a source class to meet the estimated present and anticipated user demands from that source, or to protect the water resource from serious harm, the Governing Board may declare a water shortage for the affected source class." Estimates of the percent reduction in demand required to match available supply is required and identifies which phase of drought restriction is implemented. A gradual progression in severity of restriction is implemented through increasing phases. Once declared, the District is required to notify permitted users by mail of the restrictions and to publish restrictions in area newspapers.

**Weir** A barrier placed in a stream to control the flow and cause it to fall over a crest. Weirs with known hydraulic characteristics are used to measure flow in open channels.

**Wetlands** Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

